

What Is Claimed Is:

1. A method for detecting a speed of a pump motor of a hydraulic pump system, the pump system having a pump driven by the pump motor to deliver hydraulic fluid into a pump reservoir, comprising:

detecting a pressure signal representing a fluid-delivery activity of the pump;

determining pressure peaks within the pressure signal; and

determining the speed of the pump motor based on the frequency of the pressure peaks.

2. The method as recited in claim 1, further comprising:

filtering out high-frequency interference component of the pressure signal.

3. The method as recited in claim 2, further comprising:

filtering out low-frequency interference component of the pressure signal.

4. The method as recited in claim 3, wherein the low-frequency interference component is a DC-voltage component.

5. The method as recited in claim 3, further comprising:

processing the pressure signal with a comparator circuit to obtain a square-wave signal, the square-wave signal having a frequency proportional to the pump motor speed.

6. The method as recited in claim 4, further comprising:

processing the pressure signal with a comparator circuit to obtain a square-wave signal, the square-wave

signal having a frequency proportional to the pump motor speed.

7. The method as recited in claim 3, wherein the pressure signal represents the pressure of the pump reservoir.

8. The method as recited in claim 4, wherein the pressure signal represents the pressure of the pump reservoir.

9. The method as recited in claim 5, wherein the pressure signal represents the pressure of the pump reservoir.

10. The method as recited in claim 6, wherein the pressure signal represents the pressure of the pump reservoir.

11. A device for detecting a speed of a pump motor of a hydraulic pump system, the pump system also having a pump driven by the pump motor to deliver hydraulic fluid into a pump reservoir, comprising:

- a sensor arrangement for detecting a pressure signal representing a fluid-delivery activity of the pump, and for determining pressure peaks within the pressure signal; and

- a computing arrangement for determining the speed of the pump motor based on the frequency of the pressure peaks.

12. The device as recited in claim 11, further comprising:

- a low-pass filter for filtering high-frequency interference component of the pressure signal.

13. The device as recited in claim 12, further comprising:

a high-pass filter for filtering low-frequency interference component of the pressure signal.

14. The device as recited in claim 13, further comprising:

a comparator circuit for generating a square-wave signal from the filtered pressure signal, wherein a frequency of the square-wave signal is proportional to the speed of the pump motor.

15. The device as recited in claim 11, wherein the pressure signal represents the pressure of the pump reservoir.

16. The device as recited in claim 13, wherein the pressure signal represents the pressure of the pump reservoir.

17. The device as recited in claim 14, wherein the pressure signal represents the pressure of the pump reservoir.